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ARIZONA LABOR MARKET INFORMATION NEWSLETTER

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Unemployment Rate

Seasonally Adjusted
March*

ARIZONA	5.9%
Maricopa Co.	4.6%
Pima Co.	5.3%
UNITED STATES	7.3%

Consumer Price Index

National-February
1967 - Base Year

Wage Earner/Clerical Worker -	313.9
% Chg. Yr. Ago	3.5
All Urban -	317.4
% Chg. Yr. Ago	3.5

Phoenix-1st Qtr. 1985
1977 - Base Year

All Urban -	187.8
% Chg. Yr. Ago	5.9

Producer Price Index

National-March*
1967 - Base Year

All Commodities-	308.7
% Chg. Yr. Ago	-0.8
Finished Goods -	292.4
% Chg. Yr. Ago	0.3

* Preliminary

LABOR TURNOVER UPDATE

For some time now there has been no measure of labor turnover reported in Arizona on a regular basis. That's because the U.S. Bureau of Labor Statistics (BLS) lost funding several years ago for its routine monthly turnover survey of the manufacturing industry. That labor turnover survey program for years carried the identity of the shuttle form used to collect the turnover data from employers. It was called the "1219" program among BLS and cooperating state bureaucrats. Although the program had some deficiencies, i.e., it was limited to manufacturing and mining employment, and estimates from it were only as good as the small sample of responses were representative, it was the single available local measure of the incidence of quits, layoffs, new hires and rehires.

Fortunately since the demise of that survey program, another turnover measurement technique has been devised. The technique takes advantage of an increasingly more powerful tool many of us have come to know and love --the computer. Instead of (1) sampling a small fraction of employers of a mere two industries, (2) asking them to voluntarily report their employment turnover, (3) tabulating the responses, and (4) finally extrapolating the experience of the sample to the universe of manufacturing and mining employment, we can now simply count turnover directly.

Table of Contents

Labor Turnover Update 1
Table 1: Arizona Labor Turnover by Quarter 3
Table 2: Arizona labor Turnover Rates Per Hundred Employed . 3
Table 3: Arizona labor Turnover by Industry 6
Table 4: Labor Turnover by Area 7
Table 5: Statewide-Automotive Repair Services and Garages Job Opportunities From Turnover . 7
Arizona Labor Force and Employment . . 8
Arizona Labor Force in March 12
New Developments 13

Ron Simon, Editor

Of course, we make a computer do the counting, because instead of dealing with a 1,000 responses on shuttle survey forms, we tabulate nearly two million employer records. Once programmed, the count can be done in minutes, not weeks as it formerly took during 1219 survey days.

But counting is only part of the process. Another part is categorizing the items to be counted. Doing that requires asking the question, what is labor turnover anyway? By the old 1219 program it was conceived to be divided among these components -- accessions (new hires and rehires) and separations (quits, layoffs and discharges). On the 1219 survey form, employers were simply asked, during the month just passed, how many employees were hired or recalled, and how many quit or were layed off, or discharged? Taking a count from existing records does not permit that kind of specification. Information present is limited to lists of employees by social security number for each employer, and the wages paid in the reported quarter to each employee. The report is made quarterly by employers subject to unemployment insurance tax. Because in Arizona, any employer of one or more paying wages for a specific minimum period, or amount, is subject to the tax, nearly all wage and salary employment is represented in the records.

That employment is represented by individual social security numbers makes it possible to reconstruct labor turnover by at least some of the components formerly identified in the survey. By simply matching the records of employment by social security number in one quarter against those of a previous quarter, gross accessions and separations can be identified. That is, employees present in the current quarter but not in the previous quarter are accessions. Those present in the previous quarter, but not in the current quarter are separations. By making one more pass of an even earlier quarter, rehires can be separated from new hires. Rehires are those employees whose social security number appeared in the current quarter wage records of an employer, did not appear in the previous quarter, but were present in some quarter before that one. There is still no conceivable method to distinguish among quits, layoffs, or discharges among separations by this technique.

So by changing techniques, we trade off specification of separations by a monthly sample survey of two industries for a nearly complete quarterly count of separations and accessions for all industries. As an extra added benefit, the information can now also be derived by county. With the survey it was only available statewide and for the two major metropolitian counties.

In order to assuage the concern of those readers who may have fears in the use of this technique of the arrival of "Big Brother", something needs to be said here about protecting confidentiality. Both employers and employees are identifiable in the tape files, but their identities are protected from disclosure by summarizing all information by codes. Accessions and separations are reported merely as counts by Standard Industrial Clarification (SIC) by county. Although an individual can be followed from one employer to another, the only point in doing that for labor turnover statistics is to identify the total number and rates of new hires, rehires and separations. Individual and employer identities are left to reside in the tape files, and are never reported out in any way.

Table 1
Arizona Labor Turnover
by Quarter

	82/1	82/2	82/3	82/4
Employment	865,592	921,228	885,351	NA
Accessions	259,409	269,692	249,111	
New Hires	211,291	222,820	213,580	
Rehires	48,187	46,872	35,531	
Separations	305,118	247,786	307,111	

	83/1	83/2	83/3	84/4
Employment	892,013	890,158	918,383	909,141
Accessions	259,202	315,224	319,512	307,784
New Hires	215,276	278,070	280,780	257,933
Rehires	43,926	37,154	38,732	49,851
Separations	279,353	337,678	309,415	351,942

	84/1	84/2
Employment	943,099	999,909
Accessions	355,173	387,436
New Hires	308,082	322,958
Rehires	47,091	64,478
Separations	334,763	355,031

Table 2
Arizona Labor Turnover
Rates Per Hundred Employed
by Quarter

	82/1	82/2	82/3	82/4
Employment	100.0	100.0	100.0	NA
Accessions	30.0	29.2	28.1	
New Hires	24.4	24.2	24.1	
Rehires	5.6	5.1	4.0	
Separations	35.2	26.9	34.7	

	83/1	83/2	83/3	83/4
Employment	100.0	100.0	100.0	100.0
Accessions	29.1	35.4	34.8	33.9
New Hires	24.1	31.2	30.6	28.4
Rehires	4.9	4.2	4.2	5.5
Separations	31.3	37.9	33.7	38.7

	84/1	84/2
Employment	100.0	100.0
Accessions	37.6	38.7
New Hires	32.7	32.3
Rehires	5.0	6.4
Separations	35.5	35.5

On the other hand, the idea of following employees among employers raises new possibilites even for summarized nondisclosing reporting. It raises the possibility of being able to identify movement by employees among industries and among counties. In other words, where do they leave from and go to. Even summarized by county or by industry the potential information can be very enlightening. A recent Arizona Labor Market Information Newsletter (June 1984) study of mining employees was one very specific application of the technique. The reresulting information has potential application by employers, public administrators and job seeker's.

In fact, the Research Administration has been routinely running such reports since the second calendar quarter of 1982. Data are now available through the second quarter of 1984. (There is a lagged reporting requirement by employers making data unavailable until from three to six months after the close of the quarter.) A sample of some of the data and what is revealed follows.

Tables 1 and 2 show turnover through time (1st quarter 1982 to 2nd quarter 1984) by absolute amounts and rates per hundred employed at the beginning of each quarter. There are two remarkable facts revealed by a quick glance at these tables. The first is that there is a very high amount of turnover in any given quarter. The second is that the high amounts are relatively constant across the year.

The number of accessions statewide in the most recent period shown, (2nd quarter 1984), is more than 387,000 or nearly two out of every five jobs. There is ample evidence here that total turnover measured by either accessions or separations is more than 100 percent per year. In fact in 1983, measured by the number of accessions, the rate of turnover for the year was 135 percent.

Although there is some variation in accessions rates for the nine periods shown (the range is from 28.1 percent to 38.7 percent), the variation is not great. Separation rates are similar ranging from 26.9 percent to 38.7 percent during the two and a half years.

The range of variation by industry, on the other hand, as shown by Table 3 is far more substantial. Separations occurred at as low a rate as 6.7 per hundred employed in wholesale trade and as high as 104.8 percent in agriculture. That means it would take almost fifteen years for every job to turn over in wholesale trade while in agriculture every job would turnover more than four times in one year.

Looking now at the distribution of rates by county in Table 4, notice that while accession rates range from 11.8 percent in Greenlee County to 48.2 percent in Coconino County, the metropolitan total accession rate and the nonmetropolitan rate are identical at 38.8 percent. Since the new hire rates in both the metro and nonmetro areas are also nearly the same (32.5 versus 31.2), it can be safely stated that the relative number of job opportunities generated by turnover is proportionately equal in the rural and urban areas. At least that's true for the 2nd quarter of 1984.

"The Cost of Hiring," an article in a previous issue of the Arizona Labor Market Newsletter, (January 1985) suggests the significance of these rates of turnover in dollar terms. One estimate of hiring costs presented in the article was that it ranges from 7 to 20 percent of an hourly employee's first year's pay. Taking a "dry cleaner" as a typical hourly worker in the personal service industry, for example, total be estimated. According to the Research Administration's Small Employer 1984 Maricopa County Wage Survey, a dry cleaner's average hourly wage is $6.05. That translates to an annual wage of $12,584 for a 40 hour week. Seven percent of that cost is $880. Since the personal service industry showed a new hire rate of 40.4 percent in a quarter, the annualized rate is 161.6 percent. With 11,703 people in the industry, the number of new hires per year is 18,912. That times $880 is $16,642,560, not an significant figure by any measure. And since the range of hiring costs is

really 7 to 20 percent of first year wages, the cost could be as high as $47,597,722 for the industry.

Estimating hiring costs from a more aggregate measure of wages to overcome concerns about using one occupation as the basis for an estimate gives similar high amounts. February 1985's table of "Estimated Hours and Earnings of Production Workers in Selected Arizona Industries" showed average weekly earnings in the retail trade industry of $225 in February 1984. That represents annual earnings of $11,700, and an annual payroll for the industry with 216,117 employees of $2,528,568,900. The most conservative estimate of hiring costs to the Arizona retail trade industry with an annualized new hire rate of 160.8 percent (4 x 40.2) is $284,615,715 or (.07 x 11,700) x (1.608 x 216,117). That new hire turnover cost is 11.3 percent of the annual industry payroll.

There is other significance to employers in these rates as well. An employer can compare his own experience with employee turnover to the industry "average" suggested by these tables. If his own turnover rates are substantially higher than the industry average, he may have management problems. For example, if the employer has a retail food store with a workforce of 80, and he had 13 separations (quits or discharges) per month during a recent quarter, his separation rate was 48.8 percent (3 x 13 divided by 80). Since the retail trade industry average separation rate is 43.8 percent, this store's experience is a little high. If the preponderence of separations were quits, the store manager should investigate working conditions, wages, or other factors that may be substandard for the industry and consider making appropriate adjustments On the other hand, if a manager of such a store has been worried because he had eight separations per month, he can take heart that he is doing better than the industry average (3 x 8 divided by 80 = 30.0 percent).

Finally, there is one additional potentially significant use for the labor turnover by industry data. It is potentially possible to make estimates of occupational turnover from the data. Of course, estimating requires making an assumption that personal experience tells us isn't completely true. The assumption we must make is that, in the absence of any other information, the industry turnover rate applies equally to all occupations employed by the industry. We know, of course, that when there are layoffs, production workers get layed off in proportionately greater amounts than managers or professionals. Unfortunately there are no readily available statistics to enable us to quantify the differences. Therefore, we apply our assumption. Table 5 shows the results of just such an estimating procedure applied to the "automotive repair services and garages" industry. One additional assumption, of course, is that the annualized 2nd quarter 1984 industry new hire rate will be the rate experienced in 1985.

An extraordinary conclusion from all of this is that the occupational opportunities resulting from turnover are more than 20 times the traditionally reported opportunities from growth and labor force separations. The implications of this for training programs and educational institutions are phenomenal. Because of the tremendous movement continually going on throughout the job market, there are hundreds of opportunities for job change or advancement in any given year. In fact, occupational demand has been substantially underreported by traditional methods. Even granting validity to the potential criticisim that using annualized 2nd quarter 1984 industry rate to 1985 may be inappropriate, if 1985 is not the growth year of 1984, adjusting it downward still leaves phenominally high numbers of opportunities. For instance, if the automotive repair services industry rate bears a relationship to the overall statewide new hire rate, the 2nd quarter 1982 statewide new hire rate implies an automotive repair services industry rate diminished to 1,216. Applying that factor to 1985 automotive repair services employment still implies 13,763 job opportunites, or 16 times the number of opportunites from growth and labor force separations.

One can only conclude from all of the foregoing that labor turnover rates have tremendous significance for understanding the workings of the labor market. Because there is now a reasonably efficient technique to derive them, they should be regularly reported for all who can put them to use. Hopefully, the Research Adminstration will have resources to make regular reporting possible. We would be interested in receiving user comments on these rates. Please write to the Newsletter address, or call me at 255-3871.

Ron Simon

"...the occupational opportunities resulting from turnover are more than 20 times...the opportunities from growth and labor force separations."

Table 3
Arizona Labor Turnover
By Industry
2nd Quarter 1984

INDUSTRY	EMPLOYMENT		ACCESSIONS		NEW HIRES		REHIRES		SEPARATIONS	
	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate
Agriculture	22,922	100.0	18,031	78.7	15,099	65.9	2,932	12.8	24,028	104.8
Mining	15,735	100.0	1,095	7.0	818	5.2	277	1.8	1,831	11.7
Construction	86,074	100.0	57,326	66.7	53,115	61.7	4,211	4.8	54,702	63.6
Manufacturing	155,344	100.0	32,290	20.8	29,519	19.0	2,771	1.8	32,614	21.0
Durable	122,931	100.0	22,754	18.5	21,380	17.4	1,374	1.1	24,375	19.8
Nondurable	32,413	100.0	9,536	29.4	8,139	25.1	1,397	4.3	10,344	25.4
T.C.P.U.*	54,980	100.0	9,336	17.0	8,480	15.4	856	1.6	10,344	18.8
Trade	252,262	100.0	103,163	40.9	95,443	37.8	7,720	3.1	97,013	38.5
Wholesale	36,145	100.0	9,308	25.8	8,595	23.8	713	2.0	2,427	6.7
Retail	216,117	100.0	93,855	43.4	86,848	40.2	7,007	3.2	94,586	43.8
F.I.R.E**	67,779	100.0	13,913	20.5	12,620	18.6	1,293	1.9	12,925	19.1
Services	282,996	100.0	145,795	51.5	102,118	36.1	43,497	15.4	110,076	38.9
Hotels & Motels	24,578	100.0	10,526	42.8	9,901	40.2	625	2.5	12,780	52.0
Personal Services	11,703	100.0	5,337	45.6	4,729	40.4	608	5.2	6,099	52.1
Business Services	53,643	100.0	39,831	74.2	36,940	68.9	2,891	5.4	36,894	68.8
Repair Services	13,769	100.0	6,040	43.9	5,600	40.7	440	3.2	5,937	43.1
Amusement & Recreation	11,113	100.0	5,294	47.6	4,352	39.2	762	6.8	6,566	59.0
Health Services	66,971	100.0	13,623	20.3	11,572	17.3	2,051	3.1	13,419	20.0
Legal Services	7,746	100.0	1,844	23.8	1,673	21.6	171	2.2	1,831	23.6
Educational Services	51,623	100.0	46,988	91.0	13,381	25.9	33,607	65.1	12,573	24.4
Miscellaneous	41,830	100.0	16,312	39.0	13,970	33.4	2,342	5.6	13,977	33.4
Public Administration	61,700	100.0	5,834	9.5	5,120	8.3	714	1.2	5,319	8.6

*T.C.P.U. = Transportation, Communication, and Public Utilities
**F.I.R.E. = Finance, Insurance, and Real Estate

Table 4
Labor Turnover By Area
2nd Quarter, 1984

AREA	EMPLOYMENT		ACCESSIONS		NEW HIRES		REHIRES		SEPARATIONS	
	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate
Arizona	999,909	100.0	387,436	38.7	322,958	32.3	64,478	6.5	355,031	35.5
Metro	839,313	100.0	325,490	38.8	272,620	32.5	52,870	6.3	292,090	34.8
Maricopa	673,919	100.0	273,062	40.5	224,519	33.3	48,543	7.2	238,684	35.4
Pima	165,394	100.0	52,428	31.7	48,101	29.1	4,327	2.6	53,406	32.3
Nonmetro	147,154	100.0	57,069	38.8	45,974	31.2	11,095	7.5	57,471	39.1
North	74,304	100.0	31,017	41.7	25,039	33.7	5,978	8.0	25,974	34.9
Apache	12,793	100.0	4,900	38.3	3,968	31.0	932	7.3	3,406	26.6
Coconino	20,621	100.0	9,943	48.2	7,554	36.3	2,389	11.6	7,296	35.4
La Paz	2,325	100.0	840	36.1	706	30.4	134	5.8	1,105	47.5
Mohave	11,930	100.0	5,988	50.2	4,713	39.5	1,275	10.7	5,259	44.1
Navajo	12,349	100.0	4,081	33.0	3,406	27.6	675	5.5	3,701	30.0
Yavapai	14,286	100.0	5,265	36.9	4,692	32.8	573	4.0	5,207	36.4
South	72,850	100.0	26,052	35.8	20,935	28.7	5,117	7.0	31,497	43.2
Cochise	13,294	100.0	4,988	37.5	4,230	31.8	758	5.7	4,926	37.1
Gila	7,935	100.0	1,799	22.7	1,578	19.9	221	2.8	2,382	30.0
Graham	2,997	100.0	1,052	35.1	915	30.5	137	4.6	1,003	33.5
Greenlee	3,022	100.0	357	11.8	289	9.6	68	2.2	455	15.1
Pinal	19,285	100.0	5,276	27.4	4,664	24.2	612	3.2	6,869	35.6
Santa Cruz	5,204	100.0	1,565	30.1	1,422	27.3	143	2.7	2,508	48.2
Yuma	21,113	100.0	11,015	52.2	7,837	37.1	3,178	15.1	13,354	48.2

Table 5
Statewide
Automotive Repair Services and Garages Industry (S.I.C. 75)
1985-86 Estimates of Job Opportunities
From Labor Turnover

Rank	Occupation	1985 Employment*	1986 Employment*	85-86 Growth & Labor Force Separations Job Opportunities	85-86 Turn Over** Job Opportunities	85-86 Total*** Job Opportunities
1	Mechanic, Automotive	2,123	2,230	149	3,307	3,456
2	Cleaner, Vehicle	1,522	1,603	101	2,377	2,478
3	Managers & Officers	1,194	1,256	103	1,841	1,944
4	Body Repairer, Automotive	722	758	50	1,125	1,175
5	Car Rental Clerk	557	586	57	850	907
6	General Clerk, Office	350	369	36	534	570
7	Painter, Automotive	329	348	26	510	536
8	Sales Rep., Agent, &/or Associate	289	305	24	446	470
9	Cashier	275	289	28	420	448
10	Diesel Mechanic	242	254	17	377	394
11	Tire Repairer	204	214	16	316	332
12	Glass Installer	186	196	14	289	303
13	Auto Seat Cover & Top Installer	181	191	12	283	295
14	All Other Laborers & Unskilled Workers	181	191	14	281	295
15	Fuel Pump Attendant	175	184	13	272	285
16	Rental Car Deliverer	172	181	14	266	280
17	All Other Service Workers	172	182	17	263	280
18	Bookkeeper, Hand	171	180	17	261	278
19	Truck Driver	131	138	9	204	213
20	Stock Clerk, Stockroom etc.	131	138	10	203	213
	Remaining Occupations	1,455	1,518	108	2,261	2,369
	Industry Total	10,762	11,319	805	16,686	17,521

SOURCE: * Unpublished industry staffing pattern estimated by the Occupational Employment Statistics Program.
** New Hire factor (1.628) x 1985 employment less Growth and Separations from Labor Force.
*** Sum of turnover and Growth and Labor Force Separations Job Opportunities.

Arizona Labor Force and Employment

March 1985 (in thousands)

	ARIZONA				
				-- Amt Change --	
	Mar.* 1985	Feb. 1985	Mar. 1984	Feb. to Mar.	1984 to 1985
TOTAL CIVILIAN LABOR FORCE	1483.6	1479.3	1416.0	+4.3	+67.6
Total Unemployment	86.3	84.8	75.3	+1.5	+11.0
Rate	5.8	5.7	5.3	---	---
Rate (Sea. Adj.)**	5.9	5.7	5.4	---	---
Total Employment	1397.3	1394.5	1340.7	+2.8	+56.6

THE ABOVE LABOR FORCE STATISTICS SHOULD

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	1254.7	1240.1	1161.2	+14.6	+93.5
Manufacturing	179.7	179.2	166.5	+0.5	+13.2
Durable Goods	142.5	141.9	130.8	+0.6	+11.7
Stone, Clay and Glass	7.8	7.6	7.1	+0.2	+0.7
Primary and Fabricated Metals	16.8	16.7	15.4	+0.1	+1.4
Primary Metals	7.2	7.2	6.6	+0.0	+0.6
Fabricated Metals	9.6	9.5	8.8	+0.1	+0.8
Machinery	71.7	71.8	65.8	-0.1	+5.9
Other Durable Goods	46.2	45.8	42.5	+0.4	+3.7
Aircraft and Missiles	20.8	20.6	19.1	+0.2	+1.7
Lumber and Wood Products (Except Furniture)	6.9	7.0	7.0	-0.1	-0.1
All Other Durable Goods	18.5	18.2	16.4	+0.3	+2.1
Nondurable Goods	37.2	37.3	35.7	-0.1	+1.5
Food and Kindred Products	7.9	7.9	7.8	+0.0	+0.1
Apparel	4.7	4.8	5.1	-0.1	-0.4
Printing and Publishing	14.2	14.2	12.9	+0.0	+1.3
All Other Nondurable Goods	10.4	10.4	9.9	+0.0	+0.5
Mining and Quarrying	12.2	12.3	13.1	-0.1	-0.9
Copper Mining	9.5	9.6	11.0	-0.1	-1.5
Other Mining and Quarrying	2.7	2.7	2.1	+0.0	+0.6
Construction	107.0	104.4	90.1	+2.6	+16.9
Trans., Communications, and Public Utilities	62.9	63.1	59.5	-0.2	+3.4
Transportation	28.9	29.2	27.0	-0.3	+1.9
Communications and Public Utilities	34.0	33.9	32.5	+0.1	+1.5
Trade	302.8	301.1	280.4	+1.7	+22.4
Wholesale Trade	62.9	62.3	57.4	+0.6	+5.5
Retail Trade	239.9	238.8	223.0	+1.1	+16.9
General Merchandise and Apparel	38.7	39.5	37.5	-0.8	+1.2
Food Stores	36.6	36.5	34.3	+0.1	+2.3
Automotive and Service Stations	28.5	28.2	26.2	+0.3	+2.3
Eating and Drinking Places	85.0	83.3	78.5	+1.7	+6.5
Other Retail Trade	51.1	51.3	46.5	-0.2	+4.6
Finance, Insurance, and Real Estate	74.9	74.2	70.2	+0.7	+4.7
Services and Miscellaneous	293.2	288.7	267.5	+4.5	+25.7
Hotels and Other Lodging Places	32.1	30.8	28.2	+1.3	+3.9
Business Services	65.3	63.9	56.5	+1.4	+8.8
Health Services	70.5	70.2	68.7	+0.3	+1.8
Other Services	125.3	123.8	114.1	+1.5	+11.2
Government	222.0	217.1	213.9	+4.9	+8.1
Federal	39.7	39.6	38.1	+0.1	+1.6
State and Local	182.3	177.5	175.8	+4.8	+6.5
School	111.8	107.6	109.1	+4.2	+2.7

* Preliminary
** Normal seasonal variations have been eliminated to reflect underlying economic trends.
NOTE--Prepared in cooperation with the U.S. Department of Labor,Bureau of Labor Statistics.

Arizona Labor Force and Employment

March 1985 (in thousands)

MARICOPA COUNTY					PIMA COUNTY				
			-- Amt Change --					-- Amt Change --	
Mar.* 1985	Feb. 1985	Mar. 1984	Feb. to Mar.	1984 to 1985	Mar.* 1985	Feb. 1985	Mar. 1984	Feb. to Mar.	1984 to 1985
945.6	939.6	893.3	+6.0	+52.3	269.8	269.5	258.9	+0.3	+10.9
42.6	40.8	36.8	+1.8	+5.8	14.4	14.4	12.8	+0.0	+1.6
4.5	4.3	4.1	---	---	5.3	5.3	4.9	---	---
4.6	4.4	4.2	---	---	5.3	5.3	5.0	---	---
903.0	898.8	856.5	+4.2	+46.5	255.4	255.1	246.1	+0.3	+9.3

)T BE USED FOR ECONOMIC ASSISTANCE PROGRAMS.

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

825.2	813.4	756.6	+11.8	+68.6	227.3	225.0	211.7	+2.3	+15.6
131.3	131.1	121.1	+0.2	+10.2	30.4	30.0	27.7	+0.4	+2.7
105.5	105.3	96.2	+0.2	+9.3	25.4	25.0	22.9	+0.4	+2.5
4.7	4.7	4.2	+0.0	+0.5					
11.2	11.0	9.8	+0.2	+1.4					
57.8	58.0	53.1	-0.2	+4.7					
31.8	31.6	29.1	+0.2	+2.7					
25.8	25.8	24.9	+0.0	+0.9	5.0	5.0	4.8	+0.0	+0.2
5.1	5.2	5.3	-0.1	-0.2					
2.8	2.8	3.1	+0.0	-0.3					
10.5	10.5	9.5	+0.0	+1.0					
7.4	7.3	7.0	+0.1	+0.4					
0.6	0.6	0.6	+0.0	+0.0	2.5	2.6	3.6	-0.1	-1.1
75.3	73.3	62.1	+2.0	+13.2	19.7	19.2	17.5	+0.5	+2.2
41.1	41.2	38.6	-0.1	+2.5	8.8	8.9	8.7	-0.1	+0.1
19.8	20.0	18.3	-0.2	+1.5	4.0	4.1	4.0	-0.1	+0.0
21.3	21.2	20.3	+0.1	+1.0	4.8	4.8	4.7	+0.0	+0.1
206.1	205.1	190.7	+1.0	+15.4	49.9	49.5	46.2	+0.4	+3.7
49.1	48.6	45.0	+0.5	+4.1	7.2	7.2	6.5	+0.0	+0.7
157.0	156.5	145.7	+0.5	+11.3	42.7	42.3	39.7	+0.4	+3.0
24.3	25.0	23.8	-0.7	+0.5	7.6	7.7	7.3	-0.1	+0.3
23.4	23.3	22.0	+0.1	+1.4	5.8	5.7	5.5	+0.1	+0.3
18.4	18.1	16.6	+0.3	+1.8	4.4	4.4	4.3	+0.0	+0.1
55.3	54.1	51.1	+1.2	+4.2	16.1	15.8	14.5	+0.3	+1.6
35.6	36.0	32.2	-0.4	+3.4	8.8	8.7	8.1	+0.1	+0.7
58.3	57.9	55.0	+0.4	+3.3	10.6	10.5	9.6	+0.1	+1.0
201.2	197.3	182.6	+3.9	+18.6	54.5	53.9	49.2	+0.6	+5.3
20.4	19.3	17.3	+1.1	+3.1	5.1	5.0	4.3	+0.1	+0.8
53.2	51.9	47.2	+1.3	+6.0	9.3	9.3	7.4	+0.0	+1.9
48.0	47.9	46.4	+0.1	+1.6	14.1	14.0	14.2	+0.1	-0.1
79.6	78.2	71.7	+1.4	+7.9	26.0	25.6	23.3	+0.4	+2.7
111.3	106.9	105.9	+4.4	+5.4	50.9	50.4	49.2	+0.5	+1.7

-- Prepared by Labor Market Information, Research and Analysis (CPS, 1/85)

NONMETROPOLITAN COUNTIES
LABOR FORCE AND EMPLOYMENT
MARCH 1985

	Apache	Cochise	Coconino	Gila	Graham	Green-lee	La Paz
TOTAL CIVILIAN LABOR FORCE*.	15,550	29,175	36,025	13,075	8,050	3,225	4,625
Total Unemployment	2,300	2,425	3,200	1,650	975	475	600
Rate	14.8%	8.3%	8.9%	12.6%	12.1%	14.7%	13.0%
Rate (Seas. Adj.)**. . . .	15.5%	8.3%	8.7%	12.5%	12.3%	15.4%	-INA-
Total Employment	13,250	26,750	32,825	11,425	7,075	2,750	4,025
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS							
TOTAL WAGE AND SALARY. . . .	14,475	22,850	32,500	9,750	4,800	2,725	2,450
Manufacturing.	625	1,875	2,375	1,225	150	125	70
Mining and Quarrying	25	175	50	1,625	50	1,525	0
Construction	1,225	1,300	1,500	425	125	100	75
Trans., Comm., & Pub. Util..	1,825	1,400	2,800	300	150	50	50
Trade.	1,225	4,925	7,400	1,900	1,325	275	775
Fin., Insur., & Real Estate.	275	650	700	225	125	25	75
Services and Miscellaneous .	3,775	3,000	7,275	1,800	750	100	650
Government	5,500	9,525	10,400	2,250	2,125	525	750

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
TOTAL CIVILIAN LABOR FORCE*.	23,825	24,825	32,625	8,800	32,850	35,625
Total Unemployment	2,625	3,350	4,025	1,000	2,350	4,425
Rate	11.0%	13.5%	12.3%	11.4%	7.2%	12.4%
Rate (Seas. Adj.)**. . . .	10.8%	13.2%	12.7%	13.3%	6.8%	-INA-
Total Employment	21,200	21,475	28,600	7,800	30,500	31,200
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS						
TOTAL WAGE AND SALARY. . . .	17,100	17,700	25,675	8,300	19,300	24,025
Manufacturing.	2,200	1,625	3,250	750	2,100	1,575
Mining and Quarrying	225	1,125	3,675	0	600	50
Construction	1,400	775	950	275	1,725	2,100
Trans., Comm., & Pub. Util..	1,100	1,600	1,200	600	925	900
Trade.	4,750	3,150	4,600	3,725	5,000	7,650
Fin., Insur., & Real Estate.	850	350	675	225	800	850
Services and Miscellaneous .	3,400	4,525	2,775	1,225	3,700	4,450
Government	3,175	4,550	8,550	1,500	4,450	6,450

*Adjusted to the Current Population Survey (CPS) to reflect place of residence.
**Seasonal adjustment not applicable for economic assistance programs.

NOTE--Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

ARIZONA LABOR FORCE AND EMPLOYMENT FOR ECONOMIC ASSISTANCE PROGRAMS MARCH 1985

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,483,640	1,397,306	86,334	5.8%
Apache	15,540	13,239	2,301	14.8
Cochise	29,171	26,750	2,421	8.3
Coconino	36,022	32,815	3,207	8.9
Gila	13,085	11,439	1,646	12.6
Graham	8,063	7,097	966	12.0
Greenlee	3,219	2,739	480	14.9
La Paz	4,613	4,006	607	13.2
Maricopa	945,565	903,316	42,549	4.5
Mohave	23,818	21,188	2,630	11.0
Navajo	24,831	21,469	3,362	13.5
Pima	269,814	255,457	14,357	5.3
Pinal	32,624	28,592	4,032	12.4
Santa Cruz	8,808	7,810	998	11.3
Yavapai	32,844	30,486	2,358	7.2
Yuma	35,623	31,203	4,420	12.4

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators. Note: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

ESTIMATED HOURS AND EARNINGS OF PRODUCTION WORKERS IN SELECTED INDUSTRIES IN ARIZONA MARCH 1985

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVG. HOURLY EARNINGS		
	MAR.* 1985	FEB. 1985	MAR. 1984	MAR.* 1985	FEB. 1985	MAR. 1984	MAR.* 1985	FEB. 1985	MAR. 1984
FOR THE STATE OF ARIZONA*									
Manufacturing	382.04	384.06	369.65	40.3	40.3	40.8	9.48	9.53	9.06
Aircraft & Missiles	INA	INA	INA	INA	INA	INA	INA	INA	INA
Food & Kindred Products	306.53	327.62	316.30	40.6	40.1	38.2	7.55	8.17	8.28
Primary Metals	497.32	480.98	458.81	40.4	39.2	37.7	12.31	12.27	12.17
Machinery	339.89	335.48	339.84	39.8	39.1	40.7	8.54	8.58	8.35
Copper Mining	576.72	565.55	519.39	42.5	41.8	39.8	13.57	13.53	13.05
Construction	415.70	436.60	421.36	35.5	37.0	36.8	11.71	11.80	11.45
Utilities	562.88	562.88	529.27	43.6	43.6	43.1	12.91	12.91	12.28
Retail Trade**	225.44	225.44	238.14	33.3	33.3	33.4	6.77	6.77	7.13
Wholesale Trade	363.85	354.92	346.66	38.3	38.0	39.8	9.50	9.34	8.71

* Preliminary
** Excludes eating and drinking places.
NOTE--These estimates are based on a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month. Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

--Prepared by Labor Market Information, Research and Analysis (1972 SIC, 1/84)

THE ARIZONA LABOR FORCE IN MARCH 1985

Employment continued to expand in Arizona last month, but the growth in job opportunities failed to keep the unemployment rate from rising for the fourth month in a row. With 1,500 Arizonans added to the ranks of the unemployed in March, the jobless total now stands at 86,300. This represents a significant increase over the 62,000 that were unemployed in November 1984, but still compares favorably with the record level recorded during the summer of 1982, when over 150,000 members of Arizona's labor force were unemployed.

Employment growth often slows in Arizona during March--many young adults are in school, some farms are between harvesting and planting, and the tide of winter visitors begins to peak before heading north. Nevertheless, nonagricultural wage and salary employment surged by over 14,000 last month, with the construction sector registering another strong increase. Hiring activity was particularly strong in Maricopa County, where 2,000 construction workers found jobs. Home builders, industrial contractors and others all showed large increases, and the volume of work in progress promises to keep construction employment high for the near term. So far, the prospect of a rising surplus of office space has yet to result in many layoffs in construction.

Arizona's recent economic performance has reflected a pattern seen nationally this year. The service-producing sectors of the economy have continued to expand rapidly while the participation of goodsproducing industries such as mining and manufacturing has diminished. This results from a combination of weak commodity prices and a cost producers in the international marketplace very difficult. With the presence of several large defense contractors in the state, Arizona has fared better than most. The durable goods sector added 600 workers in March despite continued softness in demand for electronic equipment in the private sector. Nondurable manufacturers, with the notable exception of printing and publishing firms, have exhibited a flat hiring pattern for over a year. In fact, some producers of food products and apparel have gone out of business while other manufacturing companies have prospered.

By contrast, the growth in finance, insurance and real estate, business services, health services, eating and drinking places and hotels is impressive. Even in northern Arizona, where economic activity is usually slow in March, hotels and lodging employment rose by over 250, a sign that the tourism industry expects a brisk spring and summer season this year. Employment also increased in the southern counties, especially in restaurants and in construction. In the urban areas, business and financial services are expanding very rapidly in response to a rising level of commerce and a steadily growing population base.

As we look to the future job situation in Arizona, we are concerned about manufacturing. It appears that the slump in the electronics industry should be temporary. However, competition in the international marketplace will keep employment from rising as rapidly as it did in 1983 and 1984. Should the current slump continue, the service industries will continue to create some jobs, but unemployment may continue to rise.

Brian Cary

ARIZONA UNEMPLOYMENT INSURANCE ACTIVITIES - MAY 1984

	May 1984	April 1984	May 1983	% Change From One Year Ago
Arizona Claimants Served*	27,157	28,149	62,346	-56.4%
Arizona Average Weeks Unemployed**	8.3	8.5	10.8	-23.1%
Arizona Benefits Paid*	$ 8,837,930	$ 8,087,757	$ 20,122,352	-56.1%
Arizona Trust Fund Balance	$212,568,755	$183,522,541	$168,168,986	+26.4%

*All Programs **UI Only

NEW DEVELOPMENTS

"New Developments" is featured each month as a service to employers and job seekers. It is a compilation of public announcements of the more significant new construction, grand openings, major hirings and layoffs and other employer events that have special significance for Arizona labor markets. The announcements are paraphrased and otherwise edited from articles published in newspapers and other periodicals from throughout the state. "New Developments" are limited to space available, and no attempt is made to compile an exhaustive list of all such events that have occurred during the month.

Construction - With the recent award of Development Action Grants, Shirley Villegas, a South Tucson City Council member, says she is confident the city's high unemployment rate will be reduced. South Tucson will receive a $500,000 grant to help finance a technical center. It plans to loan the grant to the DEV/TECH group, a combined management consulting firm, commercial and industrial real estate brokerage and general contracting business. It will use the loan to buy land for the Butterfield Technical Center. The center will be located at the Butterfield Business Center, northeast of East Irvington and South Palo Verde roads. Some 625 full-time and 25 part-time jobs are to be created from the medical and electronic research and development center. Construction is scheduled to begin in June and completion is targeted for May 1986, city officials say.

Construction will begin soon on the $20 million Koll Business Center on the northwestern corner of 48th Street and Interstate 10. The 24-acre site will be developed in phases and will contain 300,000 square feet. The Center is a joint venture of the Koll Construction Co. as the developer and the Williams Lyon Co.

Land clearing has been completed for the $8 million, 225-unit apartment complex of 10 two story buildings on nine acres at Central Avenue and Highline Canal. It is being built for the Paul Ash Investment Co., Tucson.

A $9 million, 252-unit apartment complex on East Baseline is the first phase of a planned 27-acre commercial and residential project. Future development will include another 275 apartments, 108 houses for senior citizens and a shopping center at Seventh Street and Baseline. Randy Reid of Steppe & Wilson Architects in Tempe said, "We think this shopping center is very viable." There is only a two percent commercial vacancy rate in the area.

A 40-acre medical campus in South Mountain Village is in its second phase. The campus is owned by Memorial Hospital, said Mandy Weaver, of Devenney & Associates LTD. Specialists in the $3 million facility will include obstetrics-gynecology, orthopedic surgery, general surgery and pediatrics.

Earlie Homes, Inc. has announced the opening of its new subdivision, Alta Mesa townhomes, on McClellan Road east of McKellips in Mesa. The townhomes are part of the 912-acre masterplanned Alta Mesa community which will also accommodate 99 calls for a country club, commercial services, shopping and recreational facilities to be built.

The A.S.U. Bureau of Business and Economic Research ranked the following cities according to their percent increase in home sales for 1984.

1.	Gilbert	49%
2.	Chandler	27%
3.	Scottsdale	19%
4.	Tempe	11%
5.	Phoenix	10%
6.	Glendale	8%
7.	Sun City	6%

Hotels - The city of Bisbee will receive a $800,000 grant to build a 60-room hotel and convention center. The total cost of the project will be $4.9 million and it will be built by Collier-Craft Development Co.

Manufacturing - Sundstrand Corp., an Illinois-based manufacturer of aerospace and industrial equipment, plans to open an electronics-assembly plant at Black Canyon

Tech Center on Interstate 17 between Union 12lls and Bell roads. On June lst the firm will occupy two structures, one a 60,000 square-foot single-story building and a second having 40,000 square-feet of space. The company officials are not prepared to discuss at this time the number of employees to be hired, but Maurice R. Smith, director of Sundstrand's advanced-technology group, said a second manufacturing site in the West also is being considered by the firm. Sundstrand's products include electrical-generating systems, pneumatic systems, navigation systems, underwater propulsion systems, high-speed pumps and heating and air-conditioning equipment.

General Semiconductors Industry is building a diode manufacturing facility in Cottonwood. This will be the first high technology manufacturing plant in the small Verde Valley town. Gerald Myers, GSI president said the facility is scheduled for completion in September of this year.

Coleman Products Inc. a Wisconsin-based manufacturer of electronic products plans to employ 200 local people at a new plant in Nogales, Arizona by September of this year said Tom Koos, plant manager. The American Motors subsidiary plans to manufacture wire harnesses and other electronics equipment at the new plant.

Productive Programs Inc., a Phoenix software company, has assumed the responsibility of managing the national dealer network for Tailored Data Inc. of Minneapolis. Tailored Data produces a line of fully integrated accounting software packages that are IBM-compatible. William Schuster, president of Productive Programs says that their support staff is being increased along with the newly installed 800 numbers for customer calls.

Microage Inc., the parent company of Micro-Age Computer Stores Inc. of Tempe, recently completed a $6 million private placement in preferred stock. The funds will be used to establish a 110,000 square-foot distribution center in Tempe, an 8,000 square-foot retail store, the development of a private label program and overseas expansion.

Data Processing Security Inc., a Dallas computer installation and security company is planning to build a $3.5 million computer facility near Sky Harbor International Airport. The 16,000 square-foot plant will serve as an insurance computer to companies in the event of a computer failure. Charles Scoma, vice president of Data Processing, said more than 100 companies have enrolled in the program including Texaco, Shell, Time-Life, Florida Light and Power and Hallmark Cards. Data Processing has facilities in eight cities of the U.S. The Phoenix facility is expected to open within next year depending on response in the market place.

Megatronics Inc., has signed a preliminary licensing agreement with Elite Circuits Inc., of San Diego. Megatronics will manufacture and market printed circuit boards utilizing the injection molding technology developed by Elite Circuits. Megatronics also announced the expected completion of installation in a solder coating center in the Phoenix area early this month.

Krueger Technology was able to become the first full-service surface mount contract assembly house in Arizona by placing $400,000 in new production equipment orders during the month of March. The equipment is expected to be in operation by June 15.

Indian Jobs Program - A program to provide jobs for residents of the Navajo reservation, where unemployment is more than double that of the rest of the state, was approved by a Senate panel. $257,000 will be appropriated to set up employment services offices in Window Rock, Chinle, Kayenta and Tuba City. The offices will be set up by the Department of Economic Security, but eventually would be run by the Navajo Tribal Council. The offices will provide information on jobs available throughout the state and work to bring potential employers and workers together.

The Navajo Tribe has agreed to use $50,000 in tribal funds to help establish a tribal sewing factory in Fort Defiance. The community agreed to put $35,388 of its own funds into the project and to provide the workers and supplies needed to renovate a

tribal warehouse for use as the factory. Michael Allison, Director of Economic Development for the tribe, said the factory will produce its own line of clothing, based on clothing worn by Navajo cowboys. The company is also planning to seek government clothing contracts. Initially, the factory will provide 19 greatly needed permanent jobs. Unemployment rates in the Fort Defiance area have been high for many years. The sewing factory is scheduled to be in operation by July 1st.

Mining - The April 4th closing of the Phelps Dodge Corp. New Cornelia copper smelter will mean a loss of 200 jobs for Ajo smelter workers. Company officials said only 35 employees will be transferred or retire when the smelter closes. The high cost of air-quality control equipment required to permit the smelter to operate beyond December 31st was cited by company officials as one of the causes for the

Education - Job opportunities for school- shutdown. Leonard R. Judd, Senior Vice President in charge of western mining operations said: "The inherent handicaps of operating a small smelter located a long distance from the sources of concentrates were just too great to overcome." Spokesman Ken Bennett says copper would have to rise above 80 cents a pound and remain there for some time before the company could reopen Ajo's New Cornelia smelter. Prices now are 65 to 67 cents for producers.

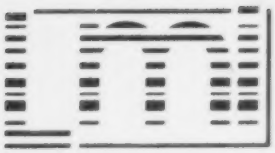
Rep. Jim Kolbe, R-Arizona, introduced a bill April 4th aimed at stopping the International Monetary Fund from making low-interest loans to Third World copper-producing countries like Chile, Peru, Zambia and Zaire. Kolbe said they are flooding the copper market and depressing the price. $4.4 billion were loaned to those countries between 1975 and 1983.

Tourism - Ajo's Chamber of Commerce committee launched a campaign to ensure the town's economic future by encouraging tourism and retirement trade. A great deal of planning, money, time and work will be necessary to achieve this goal. Bryan Blow, a leader in the committee, listed a few of the projects the Chamber of Commerce is working on: Funds are being raised to publish a full-color brochure to advertise Ajo's climate and amenities, plans for better roads and signs in the community as well as on the highways pointing to Ajo and its attractions. Some economists predicted it will take several years before Ajo's economy is diversified enough to recover in the absence of Phelps Dodge.

Government - Arizona is finding ways to resolve the problem of delays in distributing food-stamps. Governor Bruce Babbitt recently proposed pumping $1.4 million in additional funds into D.E.S., to provide 110 more jobs statewide to help with the processing. A total of 220 workers actually would be added, because of matching federal funding. Babbitt's proposal was approved by the state senate, but was reduced to 36 added workers. The proposal is pending approval from the House.

Education - Job opportunities for schoolteachers will be better in 1985-86 than 1984-85 according to the annual survey of placement officials conducted for the Association for school, college and university staffing. The survey indicated "considerable teacher shortages" in chemistry, computer programming, data processing, mathematics, and physics. The placement officials expected a surplus only of physical education teachers. The survey was conducted by James N. Akin, Associate Director of Career Planning and Placement at Kansas State University. Copies of the report are available, free of charge, from the Association for School, College and University Staffing, Box 4111, Madison, Wisconsin 66506.

University and College - Faculty salaries are up 6.6 percent nationally this academic year and the average faculty member is making $30,960. It was the fourth consecutive year in which salaries increased faster than inflation said W. Lee Hansen, Professor of Economics at the University of Wisconsin. Salary increases for college administration also outdistanced the rate of inflation for the current academic year according to a new survey by the College and University Personnel Association.



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